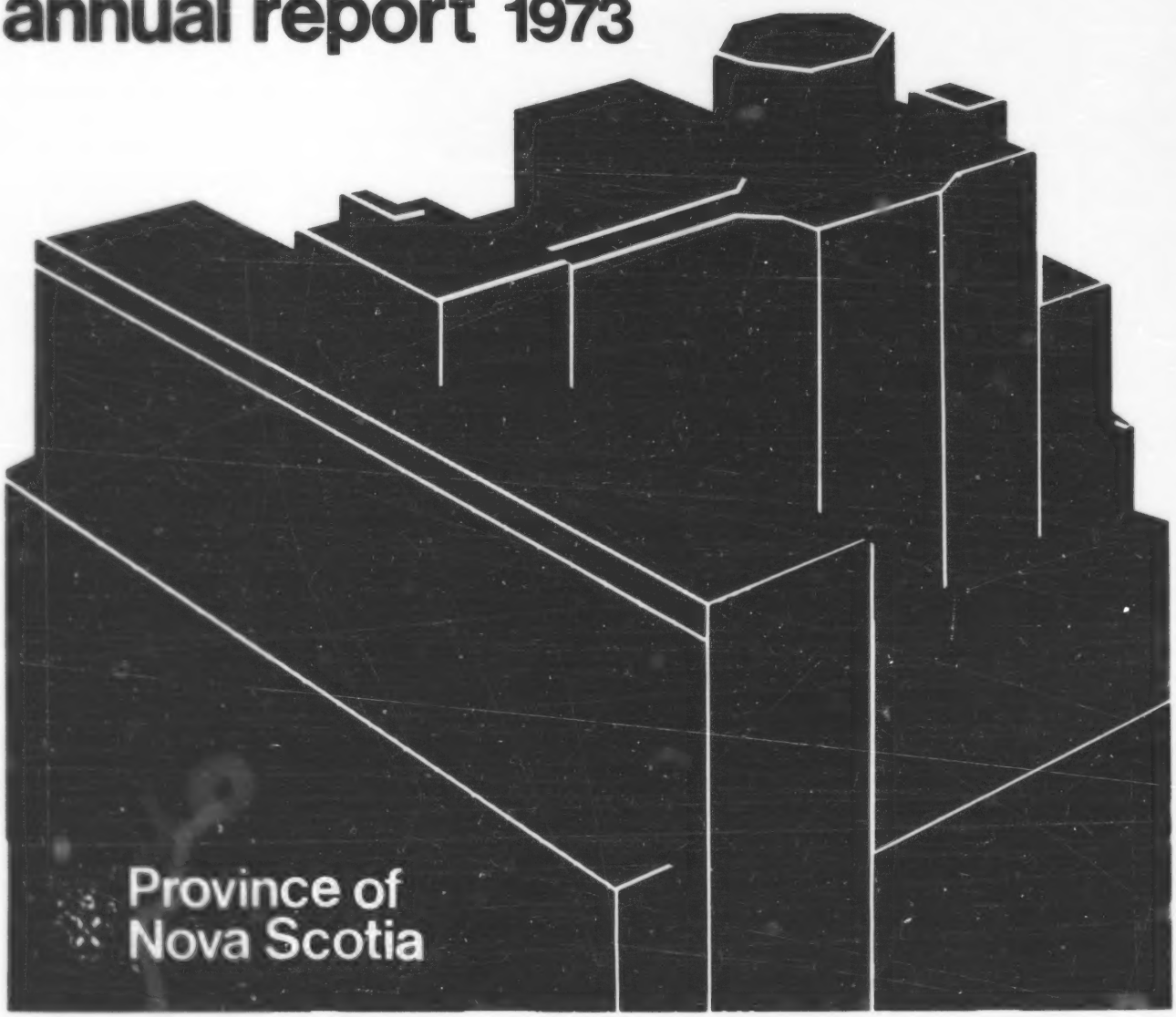
Nova S.
Hospital (Vict gen.)

# VICTORIA GENERAL HOSPITAL

## annual report 1973



Province of
Nova Scotia

101-03395/

*The Honourable William MacEachern*

*William G. McNeil*

LEGISLATIVE LIBRARY OF ONTARIO
TORONTO
APR 9 1975
RECEIVED

TO:
The Honourable Clarence Lloyd Gosse
M.D., C.M., F.R.C.S.
Lieutenant Governor of Nova Scotia

*May It Please Your Honour:*

*I beg to present herewith the annual report of the Victoria General Hospital for the year ended December 31, 1973.*

*Your obedient servant,*

William MacEachern
Minister of Public Health

TO:
The Honourable William MacEachern
Minister of Public Health
Province of Nova Scotia

*Sir.*

*On behalf of the Board of Commissioners, it is my pleasure to submit to you the 107th Annual Report of the Victoria General Hospital covering the period January 1 to December 31, 1973.*

*Respectfully submitted*

William G. McNeil
Acting Chairman
Board of Commissioners
Victoria General Hospital

*Dr. M. R. Macdonald*

# REPORT OF THE EXECUTIVE DIRECTOR

TO:
William G. McNeil
Acting Chairman
Board of Commissioners
Victoria General Hospital

Dear Sir:

I have the honour of submitting the 107th Annual Report of the Victoria General Hospital for the year ending December 31, 1973.

It is very apparent that there was a significant increase in the activities of all departments of the Hospital, clinical and service, during the year. This is not unexpected when one considers the increase in the demand for health services by the whole population.

The release of the Report of the Nova Scotia Council of Health generated much interest in planning for health care and nowhere was this more prominent than in the Halifax Metropolitan area. Toward the end of the year, plans were being formulated for a conference of all interested in the development of plans for a better co-ordinated system for the delivery of health care in the Halifax Metropolitan area to replace the fractionated and incomplete system presently in effect.

The year was not without its difficult moments; the highlight being the mass resignation of members of the nursing staff, necessitating the development of contingency plans to evacuate patients to their homes or other hospitals, and the admission of patients on a strictly emergency basis. The "walkout" lasted for five days and terminated by the satisfactory completion of negotiations. During this period, the patient census decreased to approximately 90. The chronic shortage in the nursing establishment, plus the protracted delay in completion of negotiations to settle the demands of the nursing component of the Nova Scotia Government Employees Association, contributed to the low morale found in the nursing service. However, it is to the credit of all hospital personnel that after the successful conclusion of these negotiations and the return to work of the nurses, there was no sign of recrimination on anybody's part.

Congratulations are in order to the Honourable Ian E. MacKeigan, Q.C. LL.B, on his appointment to the position of Chief Justice of the Province of Nova Scotia, which appointment necessitated his resignation as a member of the Board of Commissioners.

Congratulations are also extended to another member of the Board of Commissioners, namely, Doctor C.B. Stewart, who was invested as an officer of the Order of Canada and was also the recipient of an Honorary Doctor of Laws Degree from the University of Prince Edward Island.

The Medical Staff continued to provide excellent care to our patients. Departmental reports show not only an increase in services but, also, the addition of new services and the expansion of some old. This was particularly true of the Cardiovascular Service, where a new cardiac intensive care-recovery room was opened. A new cardiovascular investigation unit was also opened and plans were completed for the computerization of electrocardiography service on a joint basis with Dalhousie University, the Halifax Infirmary and Camp Hill Hospital.

The Emergency Department was staffed by local family practitioners under the supervision of Doctor R.F. Scharf, the Medical Director, ably supported by the interne, resident and active medical staff.

Doctor Carl Stoddard retired as Head of the Department of Anaesthesia, after 25 years of devoted service. He was succeeded by Doctor Emerson A. Moffitt.

Doctor J.S. Hammerling retired as Head of the Department of Otolaryngology. Doctor G.M. Novotny was appointed Acting Head.

Doctor C.E. vanRooyen retired as Head of the Department of Serology and Bacteriology but, fortunately, his services will still be available to the Hospital.

Doctor M.R. Macdonald resigned as Head of the Department of Preventive Medicine, to be succeeded by Doctor Peter C. Gordon, Professor and Head

of the Department of Preventive Medicine, at Dalhousie University.

Nursing Service – Reports will indicate continuation of studies on the patterns of staffing, and attempts to improve the quality of nursing care. Presently, plans are being developed to set up a nursing demonstration unit, in conjunction with the Dalhousie University School of Nursing.

In the School of Nursing, the introduction of the two-year integrated program for training of nurses was completed. It is interesting to note that two classes from the two-year training program have graduated and all reports indicate that these graduates are performing well.

The School of Nursing received full accreditation from the Registered Nurses Association, following the survey carried out by Miss Margaret Steed, R.N. Much credit is due Miss Florence O'Donnell, R.N., M.A., Director of the School, and our faculty for this fine achievement.

Nursing in-service activities increased and a well developed program of in-service is now available.

Many discussions have been held with interested parties to see if plans could be developed to ensure a stable and dependable nursing work-force in Nova Scotia, to enable hospitals to operate at capacity for 12 months of the year. This is a very serious problem, and the solution of it demands a high priority.

Studies by consultants for the Department of National Health and Welfare were carried out in the Admitting Department, the Social Service and Maintenance Departments. It is anticipated their recommendations will enable us to render an improved service to our patients.

The Auxiliary of the Hospital made magnificent donations to the Hospital in the form of equipment for the Cardiovascular Intensive Care Unit and monitors for the Audio-Visual Department. The enthusiasm and hard work of the Auxiliary is recognized by all and their generosity deserves our utmost appreciation.

Volunteer Services continued to operate in its usual busy and efficient manner.

Chaplaincy Service was formalized and is now recognized as an official hospital department.

The Nova Scotia Government Employees Association and the C.B.R.T. & G.W. Union continued to co-operate with the administration. Plans are afoot to develop methods to enable union and management to co-operate to the fullest in an endeavour to achieve their mutual objective, namely, quality patient care.

The contribution of the Board of Commissioners, the professional and service personnel of the hospital is appreciated and without their full co-operation, the complexities involved in the hospital administration would bear most heavily on the administration. To the Minister of Health and the Nova Scotia Health Services and Insurance Commission a word of appreciation for their support and co-operation is expressed.

I would like to extend my personal appreciation to the Board of Commissioners, through you, Sir, for the support and understanding extended to me during the year.

Respectfully submitted,

M.R. Macdonald, M.D.
Executive Director

# STATISTICAL SUMMARY

| | |
|---|---|
| Bed Capacity | 819 |
| Total Admissions | 16,932 |
| Average Daily Occupancy | 77.6% |
| Average Days stay Per Patient | 13.7% |
| Total Patient Days | 232,216 |
| Emergency Department Visits | 42,520 |
| Out-Patient Department Visits | 39,312 |
| Tumor Clinic Visits | 5,851 |

# MEDICAL STAFF

**Department of Medicine**

Appropriate to its role as a referral centre extending beyond the boundaries of this province, and as a major teaching hospital for adult education medicine for Dalhousie University, the range of activities for the **Department of Medicine** in-patient care, research, and education continued to expand in 1973. The number of emergency admissions has continued to increase and this remains the most important factor impeding the ability of the department to deal appropriately with its responsibility of being a major referral centre.

The department is gratified by the progress that has been made with the formation of a Metropolitan Health Planning Authority and anticipates that this body will be of benefit in working towards a long-term solution to the escalating emergency case-load faced by this hospital.

The **Cardiology Department** developed a computer-assisted interpretation program in conjunction with the Department of Biophysics of Dalhousie University. In the long run, it is anticipated that this development will help in dealing with the problem of the increasing demands of this service throughout the province. An exercise laboratory and an echocardiographic laboratory were opened during the year. Both of these were concerned, primarily, in clinical investigations and there resulted a major improvement in the quality and investigation of many cardiac problems.

The **Gastroenterology Department** continued to develop a joint medical-surgical team approach to the appropriate care of acute G.I. problems, with a significant increase in the use of the Clinical Investigation unit for patients on research protocols. It is anticipated that this trend will continue.

The **Renal Dialysis Unit** expanded its services during 1973 to improve over-all facilities and to provide space for a provincial registry of patients with chronic renal failure. This unit also worked towards developing a home dialysis program and improved liaison with the satellite units. It is anticipated that negotiations will continue during the coming year.

The **Toxicology Unit** opened during the year, has been primarily concerned with emergency problems related to overdose of drugs.

**Department of Surgery**

The **Department of Surgery** initiated a pilot project, in the use of B.C.G. in treatment of far-advanced malignancies, which is also associated with another project involving the use of newer and multiple types of chemotherapeutic drugs for the treatment of far-advanced malignancies.

The transplantation program was quite active during the year with a fairly large number of kidney transplantations being carried out with remarkable success. The Cardiovascular Recovery and Intensive Care Unit, equipped by the Victoria General Hospital Ladies Auxiliary, was opened late in 1973 and has proven to be extremely effective in the expansion of the Cardiovascular Surgery service.

The **Department of Anaesthesia** announced the retirement of Dr. Carl Stoddard, Head of the Department, after nearly 25 years in the position. He was succeeded by Dr. E.A. Moffitt on March 1, 1973. The department continued to expand both in staff members and departmental responsibility in the clinical, teaching and investigative aspects of its work. The head of the department chaired a committee to examine the efficiency of bed use. A proposal was submitted to the executive of the medical staff to consider re-allocation of beds by departments which, it is hoped, will reduce patients length of stay.

The **Department of Dentistry** announced the appointment, as assistant oral surgeon, of the first resident to complete his training at the Victoria General Hospital. The department has been able to increase the number of surgical procedures as a result of a collective staff decision to increase the ratio of sutures to surgical silk sutures and to provide the patient with extensive post-operative instructions, both oral and written. It is now the responsibility of the patient to report any abnormal findings and to report back to the clinic only as required. This resulted in a considerable reduction of post-operative visits. It was concluded that patient care does not suffer by placing this additional responsibility on the patient to monitor his own post-operative out-patient recovery.

The **Department of Gynaecology** is actively engaged in searching out information pertaining to the results of the present modes of therapy which, when completed, will be of great assistance in determining whether, or not, changes in the therapeutic techniques are indicated.

The **Department of Diagnostic Radiology.** Dr. G.F. Davis, as Deputy Head, assumed the responsibility of the day-to-day functioning of the Department. The emphasis, during the year, has been placed on the development of expanded neuroradiology department facilities. It is hoped that plans will become finalized by early in 1974.

The **Department of Neurosurgery** experienced a slight increase in the total number of procedures performed, and experienced a considerable increase in the average length of patient-stay. This resulted from an inadequate number of extended care facilities being available both in the metropolitan area and in the province.

The **Pathology Institute,** while a separate institution, is the laboratory for the Victoria General Hospital with clinical staff members being on the active staff of the hospital. The institute has three major divisions: Anatomical Pathology, Clinical Chemistry and Hematology. The work-load trend in anatomical pathology showed an increasing demand for finer, more complex, tissue examinations. Development of radioimmunoassay methodology in clinical chemistry and the development of platelet and granulocyte function tests were notable features among the 26 new tests developed by the institute during the year.

**The Department of Preventive Medicine**

Dr. M.R. Macdonald resigned as Head of the Department of Preventive Medicine. He was succeeded by Dr. P.C. Gordon, Professor and Head of the Department of Preventive Medicine of Dalhousie University. A program of tuberculosis testing of in-patients and hospital personnel was initiated to complement the admission chest x-ray program. Dr. F.R. Manuel joined the Department as Associate Physician.

The **Division of Nuclear Medicine** continues to show that it is a rapidly-expanding branch of medicine. Several new techniques have been devised through 1973 and these have contributed to patient care.

The **Department of Otolaryngology** announced the resignation of Dr.J.S. Hammerling, who joined the Consulting Staff. Dr. G.M. Novotny has taken over the position on an interim basis in the absence of a permanent appointee by the university. The Department of Otolaryngology underwent an accreditation survey by the Royal College. This resulted in continued accreditation status. The position of audiologist was approved by the hospital in 1973. The department is now actively recruiting a qualified candidate. The addition of microlaryngoscopy equipment aided in the increase of accuracy and quality of endoscopic surgery performed.

The **Department of Psychiatry** stressed that in Halifax, as well as in other areas of the country, the number of psychiatric residents is decreasing as more doctors enter private family practice. This results in a workload distribution to a lesser number of psychiatrists and this, eventually, will result in a deterioration of patient care. A number of clinical research projects in the field of psychopharmacology and community psychiatry, related to the problem of suicide, are being conducted in the department.

The **Department of Ophthalmology** treated 184 in-patients on the ward service and 231 private patients, with consultations provided to another 41 ward patients and 48 private patients. The clinic was attended by 3,480 patients. The glaucoma clinic saw an additional 289 patients, with a further 584 patients being referred to clinics for tonography and visual field determination.

The **Tumor Clinic** conducted studies related to the continued review of certain malignancies as one of its prime objectives. During the past year, four studies have been conducted as follow-up of gynaecological and other malignancies; one, in Hodgkin's Disease; one, in breast cancer; one, in melanoma; and, three in head and neck tumors. These studies, in addition to providing clinical analysis of investigation and treatment, provide the basis for educational programs and future developments of the treatment carried on in this clinic. Methods are being developed for the computerization of medical data in order that it may be more readily available to the tumor registry.

**Emergency Department** Mrs. Mildred Meagher, who retired after 14 years of service as the Emergency Department Supervisor, has been succeeded by Miss Donzella Jackson. The emergency department records were included under the unit number system and have been integrated with the in-patient medical records.

A new ambulance, purchased during the year, meets all Ontario Ministry of Health specifications which, we are reluctant to admit, are considerably higher standards than those of the Province of Nova Scotia at the present time. This vehicle has been an asset insofar as increased comfort, safety, and improved handling ability for ambulance cases are concerned.

The department, again, experienced an increase of approximately 4,000 patients during the year and has reached a total of 42,520 patient visits.

The **Outpatient Department** experienced an increase in the number of patients with a decrease in the number of visits during the year. Two new clinics, a coronary care follow-up clinic and an additional plastic surgery clinic were added during the year.

The Parkinson's Disease Clinic was phased out at the end of the year. This clinic was initially started to control patients who are on the drug Levodopa. After due consideration, it was decided that the clinic is no longer necessary as most general practitioners in the community are familiar with this form of therapy.

It was necessary to curtail services in the Psychiatric Clinic due to the shortage of medical staff. A large number of chronically-ill patients being followed by the clinic were transferred to family practitioners and greater restrictions placed on the admission of new patients to the clinic. The Orthopaedic Clinic, being the busiest department, experienced considerable space and waiting room problems which, in the opinion of the service, can only be solved if more clinics are developed to which patient load could be distributed.

# NURSING SERVICE AND EDUCATION

The **Nursing Service** experienced a serious staff shortage during 1973, reaching the critical stage by the end of June. In September, approximately 500 of the Hospital's nursing personnel resigned, after first having made contingency plans, with the co-operation of the Nova Scotia Government Employees Association, to provide staff for strategic areas, for emergency admissions, and for critically-ill patients.

This climax resulted from several extenuating factors. However, it was due, primarily, to the delay in negotiating a new wage agreement with the Civil Service Commission. The hospital provided only emergency service for a period of four days which were days of worry and frustration for all persons concerned.

The announcement that an increase of approximately 25 per cent, over a two-year period, as well as shift-differential and generous over-time benefits had been offered as a settlement, was met with enthusiasm from both groups and, subsequently, accepted by the Employees Association. Working committees were established to represent all levels of nursing staff with the ultimate objective of improving patient care and, more directly, to co-ordinate the contribution of each member to the development of better internal hospital relations.

**Nursing In-Service Education Program**

Mrs. Sandra Cook resigned as supervisor of the Nursing In-Service Education Program and has been succeeded by Miss Florence Bell.

The orientation program for employees joining the nursing staff has been expanded to include approximately 35 hours of instruction prior to their unit orientation. The general orientation to the hospital includes a variety of programs related to medications, hospital policies and procedures, and includes classes from a number of people in the Allied Health Professions.

In addition to the regular programs, two six-week intensive-care nursing courses were attended by 30 registered nurses from our hospital and other hospitals in the Province. Three one-day workshops, for all levels of nursing staff, were held on communications, sleep, and patient teaching. Two other workshops, for supervisors, were held on management training and nursing histories. In the fall, plans were made by the Nursing Service and School of Nursing at Dalhousie University for the joint appointment of Miss Norma Wylie, R.N., B.Sc., Nursing Consultant, to set up a demonstration unit for patient care, aimed at studying staffing patterns and other nursing problems. It is anticipated that this project will begin early in 1974.

During 1973, the **School of Nursing** culminated several years work on the integrated two-year nursing program. The course is structured, primarily, as a Principles Program with the fundamentals of biological and behavioral sciences as a basis. Teaching methods include lectures, group discussions, role playing, independent study and laboratory work which varied widely through extensive utilization of audio-visual teaching and self-learning teaching aids.

In August, the School assumed responsibility for the administration, planning, co-ordination and selection of learning experience for students in paediatric nursing, which concluded the integration of affiliating facilities. The position of curriculum co-ordinator has been established; it is hoped that the position will help to effect improved liaison with the nursing service at the head-nurse and instructor level.

During the latter part of the year, the School was reviewed by the Registered Nurses Association and received full accreditation. A comprehensive faculty manual, compiled during the year, has proven to be an effective aid in co-ordinating activities. A two-day workshop for Maritime participation on the topic of "Nursing Instructor: Guest in a Hospital" was held.

The School, which graduated 137 students in September, had a total enrollment of 175 first- and second-year students during the year, with a faculty of 29 instructors.

# SUPPORT STAFF

The **Social Service Department,** as a result of the study carried out by Miss Betty Wong, consultant, welfare manpower development, Department of National Health and Welfare, undertook a project to determine the effectiveness of the team approach for social service delivery. The team includes workers at the masters, under-graduate, BSW and the technical level which involves one year post-matriculation training.

The team approach had increased the range and quality of services offered to patients and has been a major factor in the successful integration of social work technicians into the service without reducing the standard of professional care. It reduces over-lapping of functions, develops a degree of specialization, minimizes the misuse of highly-trained professionals and ensures that functions which do not require as high a degree of training are carried out by the technically-trained social worker.

The **Medical Records Department** undertook two major tasks which involved the integration of the emergency department medical record with in-patient records, and the introduction of the Weed System of medical record charting in the Department of Medicine.

In consequence of the emergency admission case load, the Medical Records Department found it necessary to provide coverage for the night shift and now operates on a 24-hour/7-day-week basis. A power card storage unit was installed to facilitate retrieval of patients' social data and unit number in order to retrieve the chart from the master files.

Plans were made and equipment was ordered to expand the centralized dictating system, in order to provide separate receiving units for dictation of operative reports and for the Department of Medicine.

Mr. Frank Oram was appointed as Chief Librarian for the **Health Sciences Library** and the **School of Nursing Library.** The role of the Library changed from a depository of books and journals into a service-orientated information centre, serving all hospital staff. A computerized union catalogue was compiled and in which all hospital holdings are listed. Centralized acquisition of books and journals was introduced as a means of controlling purchases, avoiding duplications and ensuring that funds were utilized in a manner which would be beneficial to the greatest number of hospital staff. A paging system for obtaining books and journals, not available in the hospital library, was started in co-operation with the W.K. Kellogg Health Sciences Library of Dalhousie University Medical School.

The Hospital **Pharmacy** completely updated the Hospital Formulary and it has incorporated in it the Canadian Compendium of Pharmaceutical Specialties. After a feasibility study early in the year, it was decided that stock in the pharmacy stores should be computerized. At year's end, the computer program, while not complete, has proven extremely effective in the control of all pharmacy stock items.

The department has participated in several drug studies during the year and, in addition, has completed a number of pilot projects on the use of disinfectants in the emergency department and the Tubex method of administering injectibles.

The efforts of the department to produce Sulphadiazine by chemical process, and to incorporate this powder in a cream for topical use in treatment of burns, has proven extremely effective. The department continues its active participation with the School of Pharmacy at Dalhousie University in the instruction and introduction of students to hospital pharmacy.

The **Sterile Supply Service** experienced a large increase in demand for services and supplies of linen packs for the Operating Room, in consequence of an approximate 13 per cent increase in operating room case load. Plans were made to reorganize the quota system to include all medical/surgical supplies and these, also, are to be included in a computerized program to record utilization by ward, or unit.

The **Audio Visual Department** was relocated to the 13th floor of the Victoria Building where greatly expanded facilities have been made available. There has been a marked increase in demand for clinical photography to a point where it has become necessary to have some of the film processing done in outside laboratories. The hospital projectionist has been placed under the supervision of the chief photographer. There has been a substantial increase in demand for this service in consequence of the greater interest being developed in continuing education and, also, the change in emphasis on education within the hospital.

The **Biomedical Engineering Department** carried out a considerable number of special projects which included the modification, the installation, or the complete construction of instruments. Major projects included modification to the installation of equipment in the cardiac catheterization laboratory, and the design of a weight-loaded device to exercise patients undergoing cardiac catheterization.

A test unit was developed to simulate the operation of a heart valve to assist Dr. Eldon Smith in his research on the motions of artificial heart valves. The medical closed circuit television system has been extended to provide viewing facilities in several additional conference rooms throughout the hospital. Additional equipment, also, was installed for eight coronary care unit beds by the department.

The **Dietary Department** graduated 11 dietetic interns who completed the 12-month dietetic internship program. The Dacum System was introduced in the area of therapeutics as a student teaching tool defining skills related to competence. This is a system whereby an instructors guide and rating system are built into a curriculum. An individualized rotating schedule system for students was used and was highly successful, allowing the student a month's elective rotation in their choice of specialty and interest.

The dieticians are extremely active in the renal dialysis unit where a consultation is held with each patient when he, or she, comes in for dialysis. The diabetic day-care centre has been very active during the year, with emphasis being placed in improving the education of the diabetic. A brief was prepared and submitted to the nursing committee on system and procedures in the hope that it will serve as a basis for a method of better instruction for in-patients. In-service programs were held for nursing staff as well as for dieticians and representatives of the community. A film of the Diabetes Day-Care Centre was prepared and presented on cable television for viewing by the public and students from the health professions.

The Hospital **Auxiliary** has contributed substantial funds to the hospital from its operation of the Acadia Room coffee shop, gift shop, flower delivery, beauty salon, and barber shop. The Auxiliary operates a lending library cart and mobile gift cart. A mobile coffee cart is operated by the members, free of charge, in the emergency department and all out-patient clinics. The visiting committee visits patients and is always extremely helpful in doing little errands for the patients, making phone calls, etc., when the patient is unable to do this for himself.

During the year, the Auxiliary held several successful coffee parties in the nurses residence. The annual Kris Kringle Korner, a sale of small gifts, prior to Christmas, in the main lobby of the hospital, was extremely successful. The Auxiliary also sponsored a successful concert featuring Mr. Claude Dupre on the Yamaha organ in the Rebecca Cohn Auditorium.

The **Volunteer Service** provided an increased area of assistance during the year and was especially helpful to the old age pensioners by assisting them in doing their banking and, sometimes, in paying rent or other bills for them. New sources for diversional aids were sought and after sending a number of appeals to current and former volunteers, extra books, magazines, cards and games were collected.

The **Central Escort Service** which was developed about six years ago, has grown to encompass all areas of the hospital. It now has 42 full-time, and 15 part-time staff members and answers a total of some 270,000 calls per annum. The department is also planning for future expansion to include laundry, stores, central service, operating rooms and pharmacy.

The Health Facilities Design Directorate of the National Health and Welfare Department carried out a survey of facilities of the Victoria General Hospital physical plant, in co-operation with members of the staff of the **Maintenance Department.** The report contained major recommendations concerning the Jubilee West Annex, Pavilion, Brick Cottage, Emergency Department, Nurses Residence, Coronary Care and Intensive Care Units and parking facilities.

A second study carried out by the same directorate was entitled "A Report of a Study of the Maintenance Department." In all, 40 recommendations were made – some of which have already been carried out during 1973. The department began developing a preventive maintenance program which consists of a cardex file and, to date, 2,000 items have been identified and a maintenance schedule determined.

The capacity of the medical compressed air system has been greatly increased with the co-operation of the Pathology Institute which allowed the Victoria General Hospital to utilize a portion of its compressed air system.

# RESEARCH

Three research projects are under investigation in the Department of Dentistry. They are: "Cardiovascular Effects of Atropine Used as a Pre-medicant in Ambulatory General Anesthesia"; "A Comparative Study of the Recovery Rates of Diazapam and Pentobarbital Sodium"; and "An Investigation of the Clinical Use of Proplast."

Dr. L.P. Heffernan received a grant from the National Research Council and Muscular Dystrophy Association to study EMG and muscle biopsy results in the paraspinal muscles. This is an original piece of work, designed to determine whether the most proximal muscles are involved early in myopathic conditions and if EMG studies and biopsies of these muscles will yield better and earlier diagnosis as compared with studies done in the girdle muscles.

In the Renal section of the Hospital, Dr. R. Brewer Auld is conducting two research projects: chronic micropuncture studies of renal sodium handling and the role of renal cyclic AMP in sodium excretion.

A paper entitled "Chemical and Biochemical Investigation of Therapies in Rheumatoid Arthritis" was presented to the 23rd International Congress of Pharmaceutical Sciences in Stockholm. The paper was co-authored by David Fielding, M.Sc.; Michael Mezei, Ph.D.; S. Ahmad, M.D., F.R.C.P.(C), and J.F.L. Woodbury, M.D., F.R.C.P.(C). Dr. B.D. Gokul, resident in Rheumatology, carried out a study of more than 100 patients with Primary Generalized Osteoarthritis. Dr. T.G. Ghose, Pathologist at Dalhousie University, studied antinuclear factors in the rheumatic diseases and also participated in a study in common with Dr. John Crocker, Dr. K.R. Rozee, and the Director of the Rheumatic Disease Unit.

Dr. Patrick Flynn was active in clinical research projects, largely in the field of psychopharmacology. Dr. S. Hirsch and his outpatient staff are emerging as Canadian authorities in community psychiatry, especially with the problems of suicide. Dr. Charles David wrote for the American Journal of Psychotherapy on innovations in psychotherapeutic techniques and was invited to join the book review staff of the publication.

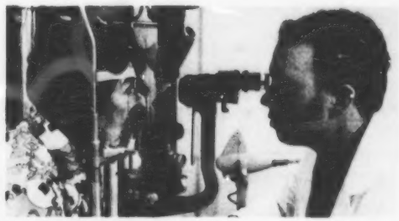
Several new projects in the treatment of patients were begun in the Department of Surgery. A pilot project in the use of BCG in the treatment of far-advanced malignancies was run by Dr. Allan MacDonald; the Victoria General Hospital is probably further advanced in the use of this material than any other hospital in Canada. Another related project involves the use of newer and multiple types of chemotherapeutic drugs for the use of far-advanced malignancy.

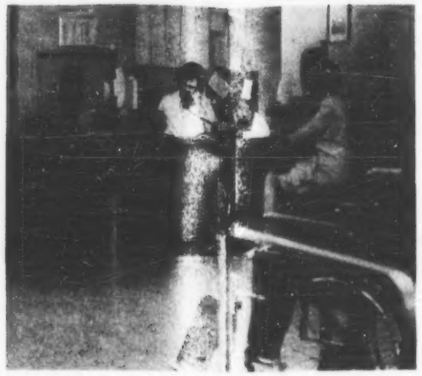
The Gastrointestinal Service continued its basic research program and gained a national and possibily international reputation. Dr. Ian Macdonald received an invitation to give a paper and participate in a workshop in Freiburg, West Germany, at the third meeting on Advances in Bile Acid Research. Several GI members presented papers and chaired symposia at national meetings. Dr. J.J. Sidorov accepted the position of editorial board member of the American Journal of Digestive Diseases and chaired the Committee for International Liaison of American Gastroentrological Association for the second year.

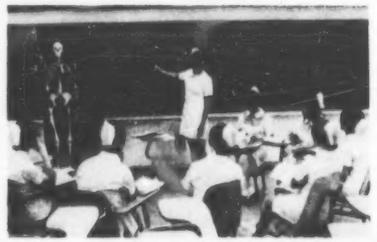
A study was made by the dietician and nurse on the teaching of the diabetic inpatient. A brief was presented to the Nursing Committee on Systems and Procedures, to serve as a basis for a better method of teaching the inpatient.

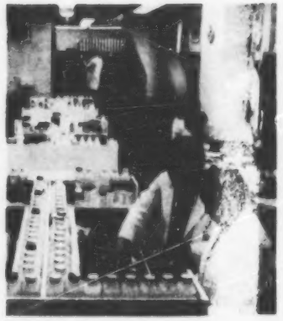
Pharmacy participated in several drug studies, some dealing with new drugs which have not yet been marketed, and others assessing the comparative efficiency of specific therapeutic agents. Outstanding was the trial on the oral use of BCG vaccine in the treatment of Carcinoma. Trial projects were also done on a disinfectant in the emergency department and on the tubex method of administering injectibles on 8 Victoria (the latter proved expensive and not well accepted by patients or nursing staff). Attempts to produce silver sulphadiazine by chemical process and incorporate it into a cream for topical use were successful.

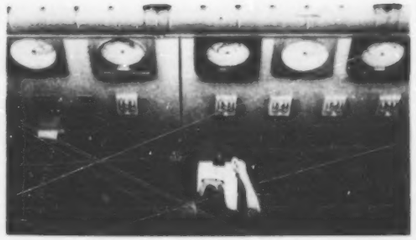
# HEALTH CARE...
## A TEAM EFFORT











## ANALYSIS OF HOSPITAL SERVICES FOR 1973

| Services | Male | Female | Total | Died Under 48 Hours | Died Over 48 Hours | Total Deaths | Death Rate | No. of Autopsies | Autopsy Rate | Patients Receiving Consult. | Consult. Rate | Total Days | Average Days Stay |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ward** | | | | | | | | | | | | | |
| Medicine | 1,870 | 1,449 | 3,319 | 62 | 220 | 282 | 8.5 | 121 | 42.9 | 993 | 29.9 | 54,569 | 16.4 |
| Surgery | 1,304 | 974 | 2,278 | 23 | 107 | 130 | 5.7 | 52 | 40.0 | 597 | 26.2 | 33,441 | 14.7 |
| Plastic Surgery | 323 | 100 | 423 | 4 | 8 | 12 | 2.8 | 6 | 50.0 | 76 | 18.0 | 5,360 | 12.7 |
| Orthopaedics | 509 | 303 | 812 | 2 | 9 | 11 | 1.4 | 3 | 27.3 | 158 | 19.5 | 13,921 | 17.1 |
| Neurosurgery | 307 | 165 | 472 | 19 | 28 | 47 | 10.0 | 35 | 74.5 | 147 | 31.1 | 8,454 | 17.9 |
| Ophthalmology | 113 | 71 | 184 | – | – | – | – | – | – | 41 | 22.3 | 2,354 | 12.8 |
| Otorhinolaryngology | 182 | 89 | 271 | 3 | 2 | 5 | 1.8 | 2 | 40.0 | 84 | 31.0 | 2,632 | 9.7 |
| Newborn | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Gynaecology | – | 1,367 | 1,367 | 1 | 10 | 11 | 0.8 | 6 | 54.5 | 289 | 21.1 | 8,204 | 6.0 |
| Urology | 846 | 256 | 1,102 | 2 | 19 | 21 | 1.9 | 8 | 38.1 | 234 | 21.2 | 13,159 | 11.9 |
| Psychiatry | 63 | 155 | 218 | – | – | – | – | – | – | 105 | 48.2 | 5,658 | 26.0 |
| **Private** | | | | | | | | | | | | | |
| Medicine | 397 | 460 | 857 | 1 | 26 | 27 | 3.2 | 10 | 37.0 | 402 | 46.9 | 14,417 | 16.8 |
| Surgery | 1,020 | 1,371 | 2,391 | 1 | 47 | 48 | 2.0 | 16 | 33.3 | 602 | 25.2 | 32,563 | 13.6 |
| Plastic Surgery | 98 | 114 | 212 | – | – | – | – | | – | 33 | 15.6 | 1,759 | 8.3 |
| Orthopaedics | 292 | 304 | 596 | – | 2 | 2 | 0.3 | | 50.0 | 123 | 20.6 | 8,412 | 14.1 |
| Neurosurgery | 168 | 186 | 354 | 1 | 9 | 10 | 2.8 | 7 | 70.0 | 120 | 33.9 | 5,138 | 14.5 |
| Ophthalmology | 100 | 132 | 232 | – | – | – | – | – | – | 48 | 20.7 | 2,009 | 8.7 |
| Otorhinolaryngology | 135 | 128 | 263 | – | – | – | – | – | – | 23 | 8.7 | 1,360 | 5.2 |
| Gynaecology | – | 992 | 992 | – | 2 | 2 | 0.2 | 1 | 50.0 | 104 | 41.6 | 8,461 | 8.5 |
| Urology | 316 | 108 | 424 | – | 3 | 3 | 0.7 | 1 | 33.3 | 116 | 27.4 | 6,059 | 14.3 |
| Psychiatry | 57 | 108 | 165 | – | – | – | – | – | – | 54 | 32.7 | 4,286 | 26.0 |
| Total Private | 2,583 | 3,903 | 6,486 | 3 | 89 | 92 | 1.4 | 36 | 39.1 | 1,625 | 25.1 | 84,464 | 13.0 |
| Total Ward | 5,517 | 4,929 | 10,446 | 116 | 403 | 519 | 5.0 | 233 | 44.9 | 2,724 | 26.1 | 147,752 | 14.1 |
| Grand Total | 8,100 | 8,832 | 16,932 | 119 | 492 | 611 | 3.6 | 269 | 44.0 | 4,349 | 25.7 | 232,216 | 13.7 |

### SELECTED STATISTICS

| | | |
|---|---|---|
| Pathology – Total tests performed | | 1,262,350 |
| Clinical Bacteriology – Units | | 260,612 |
| Diagnostic Radiology | | 117,000 |
| Radiotherapy – Cobalt treatments – 22,793 | | 1,299 |
| Pharmacy Orders | | 99,189 |
| Electroencephalographs | | 2,462 |
| Electrocardiograms | | 25,310 |
| Anesthetics Administered | | 18,985 |
| Dietary Department Meals Served | | 1,537,569 |
| Audio-Visual Photos and Slides | | 3,003 |
| Central Supply Service – Trays and Supplies used | | 115,586 |
| Respiratory Technology – Patients treated | | 3,851 |
| Pulmonary Lab Tests | | 803 |
| Blood Gas Lab – tests | | 17,704 |
| Dentistry Procedures | | 14,309 |
| Social Service – Total units of Service Patients | | 27,652 |
| | In-Patients | 2,016 |
| V.O.N. | Out-Patients | 526 |
| | Referrals | 1,096 |
| | Clinic Follow-up | 759 |
| | Interviews | 1,249 |
| Ambulance Calls | | 4,374 |
| Physiotherapy Visits | In-Patients | 34,249 |
| | Out-Patients | 15,961 |
| Laundry Department – pounds processed | | 3,734,961 |
| Blood Specimen Collection Service Units | | 108,001 |
| Number of Operations | | 19,240 |
| G.I. Function Lab procedures | | 782 |
| Endoscopy Service Tests | | 614 |
| Cardiac Catheterization Lab Patients | | 732 |
| Immunization Clinic Attendance | | 4,606 |
| Physical Examinations | | 2,221 |
| Tuberculin Tests | Staff | 1,388 |
| | Patients | 5,394 |
| Communicable Diseases Reported | | 324 |
| Chest X-ray Program | | 32,932 |
| Pap Tests | | 2,720 |

## BOARD OF COMMISSIONERS

William G. McNeil – Acting Chairman
W. Murray Gould
Ms. Carolyn MacGregor
Thomas Miller
Ted Rawding
Fred Robinson
Chester B. Stewart, M.D.

## ADMINISTRATIVE STAFF

M.R. Macdonald, M.D., C.M., D.P.H., F.R.C.P.(C), *Executive Director*
D.M. McNaughton, C.D., B.A., M.H.A., *Administrative Director*
A.W. Taylor, M.D., D.H.A., *Medical Director*
J.J. Hendriks, *Administrative Assistant*
H.J. Churchill, *Director of Accounting Services*
R.E. Buckley, B.Sc., *Personnel Officer*
Miss F.B. Gass, B.Sc., R.N., *Director of Nursing Service*
Mrs. G.I. Grant, B.Sc. N., R.N., *Assistant Director of Nursing Service*
Mrs. J. Magee, B.Sc.N., R.N., *Acting Director, School of Nursing*
Miss J.A. Stewart, B.Sc., P.Dt., *Director Dietetics*
Miss K. Kinley, Ph.C., *Chief Pharmacist*
Miss M.T. Gillis, B.Sc., R.N., *Supervisor of the Outpatient Department*
Mr. R.W.J. Hollett, *Fire and Security Officer*
R.A. Arthur, B.E.E., *Maintenance Manager and Chief Engineer*
W.C. Houlihan, *Supplies Officer*
Mrs. W. Meagher, *Supervisor – Emergency Department till June 1973*
Miss D. Jackson, *Supervisor – Emergency Department from June 1973*

## ACTIVE MEDICAL STAFF

### Medicine

Dr. R.N. Anderson, *Head*
Dr. R.C. Dickson, *Senior Physician*
Dr. B.M. Chandler, *Associate Physician*
Dr. H.N.A. MacDonald *Associate Physician*
Dr. R.M. MacDonald, *Associate Physician*
Dr. A.J. MacLeod, *Associate Physician*
Dr. W.A. Murray, *Associate Physician*
Dr. H.C. Read, *Associate Physician*
Dr. J.J. Sidorov, *Associate Physician*
Dr. L.C. Steeves, *Associate Physician*
Dr. D.J. Tonning, *Associate Physician*
Dr. J.F.L. Woodbury, *Associate Physician*
Dr. S. Ahmad, *Assistant Physician*
Dr. R. Brewer Auld, *Assistant Physician*
Dr. B.W.D. Badley, *Assistant Physician*
Dr. S.F. Bedwell, *Assistant Physician*
Dr. A.D. Cohen, *Assistant Physician*
Dr. F.A. Davis, *Assistant Physician*
Dr. J.D. Gray, *Assistant Physician*
Dr. R.D. Gregor, *Assistant Physician*
Dr. J.H. Haldane, *Assistant Physician*
Dr. L.K. Harris, *Assistant Physician*
Dr. O.A. Hayne, *Assistant Physician*
Dr. L.P. Heffernan, *Assistant Physician*
Dr. W.W. Ing, *Assistant Physician*
Dr. P.L. Landrigan, *Assistant Physician*
Dr. G.R. Langley, *Assistant Physician*
Dr. P.A. MacGregor, *Assistant Physician*
Dr. A.R. Macneil, *Assistant Physician*
Dr. H.S. Murray, *Assistant Physician*
Dr. T.J. Murray, *Assistant Physician*
Dr. J.R. Rae, *Assistant Physician*
Dr. E.L. Reid, *Assistant Physician*
Dr. J.B. Ross, *Assistant Physician*
Dr. S. Salisbury, *Assistant Physician*
Dr. A.H. Shlossberg, *Assistant Physician*
Dr. E.R. Smith, *Assistant Physician*
Dr. F.M. Smith, *Assistant Physician*
Dr. J.W. Stewart, *Assistant Physician*
Dr. C.N. Williams, *Assistant Physician*
Dr. S.E. York, *Assistant Physician*
Dr. D.R.S. Howell, *Dermatologist*
Dr. H.I. Goldberg, *Assistant Dermatologist*
Dr. G.J.H. Colwell, *Associate Physician (Physical Medicine)*
Dr. A.H. Shears, *Assistant Physician (Physical Medicine)*

### Surgery

Dr. G.W. Bethune, *Head*
Dr. J.H. Charman, *Chief of Service*
Dr. E.P. Nonamaker, *Chief of Service*
Dr. J.K.B. Purves, *Chief of Service*
Dr. J.F. Ross, *Chief of Service*
Dr. R.H. Yabsley, *Chief of Service*
Dr. A.J. Buhr, *Associate Surgeon*
Dr. F.G. Dolan, *Associate Surgeon*
Dr. C.H. Graham, *Associate Surgeon*
Dr. C.E. Kinley, *Associate Surgeon*
Dr. G.J. LeBrun, *Associate Surgeon*
Dr. J.A. Myrden, *Associate Surgeon*
Dr. D.M. Nicholson, *Associate Surgeon*
Dr. S.T. Norvell, *Associate Surgeon*
Dr. T.M.F. Roberts, *Associate Surgeon*
Dr. B.J. Steele, *Associate Surgeon*
Dr. D.V. Willoughby, *Associate Surgeon*
Dr. G.R. Burns, *Assistant Surgeon*
Dr. J.P. Curry, *Assistant Surgeon*
Dr. M. Erdogan, *Assistant Surgeon*
Dr. A.C. MacDonald, *Assistant Surgeon*
Dr. A.S. MacDonald, *Assistant Surgeon*
Dr. W.S. Parkhill, *Assistant Surgeon*
Dr. D.P. Petrie, *Assistant Surgeon*
Dr. R.F. Scharf, *Assistant Surgeon*
Dr. H.L. Stewart, *Assistant Surgeon*

### Anaesthesia

Dr. E.A. Moffitt, *Head*
Dr. C.C. Stoddard, *Anaesthetist*
Dr. R.M. Ballem, *Associate Anaesthetist*
Dr. A.A. Drysdale, *Associate Anaesthetist*
Dr. K.W. Fairhurst, *Associate Anaesthetist*
Dr. R.A.P. Fleming, *Associate Anaesthetist*
Dr. I.E. Pukis, *Associate Anaesthetist*
Dr. W.A.P. Thompson, *Associate Anaesthetist*

Dr. D.D. Imrie, *Assistant Anaesthetist*
Dr. Y.M. Patel, *Assistant Anaesthetist*
Dr. J.A. Smith, *Assistant Anaesthetist*

**Dentistry**

Dr. F.W. Lovely, *Head*
Dr. A.E. Hoffman, *Associate Oral Surgeon*
Dr. A.K. Bhardwaj, *Assistant Oral Surgeon*
Dr. D.S. Precious, *Assistant Oral Surgeon*

**Diagnostic Radiology**

Dr. J.S. Manchester, *Head*
Dr. G.E. Davis, *Associate Radiologist*
Dr. R.H. James, *Associate Radiologist*
Dr. A.D. MacKeen, *Associate Radiologist*
Dr. A.J. Shaw, *Associate Radiologist*
Dr. D.R. Campbell, *Assistant Radiologist*
Dr. W.H.N. Covert, *Assistant Radiologist*
Dr. B. Der, *Assistant Radiologist*
Dr. D.B. Fraser, *Assistant Radiologist*
Dr. L.A. Fried, *Assistant Radiologist*
Dr. C.L. MacMillan, *Assistant Radiologist*
Dr. W.F. Mason, *Assistant Radiologist*
Dr. M.D. Riding *Assistant Radiologist*

**Gynecology**

Dr. W.R.C. Tupper, *Head*
Dr. J. McD. Corston, *Associate Gynecologist*
Dr. I.A. Perlin, *Associate Gynecologist*
Dr. S.C. Robinson, *Associate Gynecologist*
Dr. S.C. MacLeod, *Associate Gynecologist*
Dr. D.W. Cudmore, *Assistant Gynecologist*
Dr. R.C. Fraser, *Assistant Gynecologist*
Dr. T.R. Martin, *Assistant Gynecologist*
Dr. R.H. Lea, *Assistant Gynecologist*

**Neurosurgery**

Dr. W.D. Stevenson, *Head*
Dr. W.S. Huestis, *Associate Neurosurgeon*
Dr. W.J. Howes, *Assistant Neurosurgeon*
Dr. R.A. Langille, *Assistant Neurosurgeon*
Dr. H.G. Malik, *Assistant Neurosurgeon*

**Ophthalmology**

Dr. D.M. MacRae, *Head*
Dr. R.F. Hand, *Associate Ophthalmologist*
Dr. C.F. Keays, *Associate Ophthalmologist*
Dr. J.H. Molloy, *Associate Ophthalmologist*
Dr. D.K. Murray, *Associate Ophthalmologist*
Dr. D.B. O'Brien, *Associate Ophthalmologist*
Dr. J.H. Quigley, *Associate Ophthalmologist*
Dr. M.S. Ramsey, *Associate Ophthalmologist*
Dr. E.V. Rafuse, *Assistant Ophthalmologist*
Dr. R.M. Read, *Assistant Ophthalmologist*
Dr. G.A. Sapp, *Assistant Ophthalmologist*

**Otolaryngology**

Dr. G.M. Novotny, *Acting Head*
Dr. R.S. Murphy, *Associate Otolaryngologist*
Dr. M.S.C. Sekeran, *Associate Otolaryngologist*
Dr. M.N. Wali, *Associate Otolaryngologist*
Dr. J.S. Goomar, *Assistant Otolaryngologist*
Dr. V. Ketene *Assistant Otolaryngologist*

**Pathology**

Dr. D.T. Janigan, *Head*
Dr. J.H. Cooper, *Associate Pathologist*
Dr. G.M. Fraser, *Associate Pathologist*
Dr. J.T. Hindmarsh, *Associate Pathologist*
Dr. M.A. MacAulay, *Associate Pathologist*
Dr. H.C. Read, *Associate Pathologist*
Dr. H.P. Dincsoy, *Assistant Pathologist*
Dr. V.E. Sangalang, *Assistant Pathologist*
Dr. I. Zayid, *Assistant Pathologist*

**Preventive Medicine**

Dr. P.C. Gordon, *Head*
Dr. F.R. Manuel, *Assistant Physician*

**Psychiatry**

Dr. R.O. Jones, *Head*
Dr. P. Flynn, *Associate Psychiatrist*
Dr. H.K. Hall, *Associate Psychiatrist*
Dr. S. Hirsch, *Associate Psychiatrist*
Dr. J.F. Nicholson, *Associate Psychiatrist*
Dr. C.J. David, *Assistant Psychiatrist*
Dr. B.K. Doane, *Assistant Psychiatrist*
Dr. D.L. Hirsch, *Assistant Psychiatrist*
Dr. D.J. King, *Assistant Psychiatrist*
Dr. L. Kovacs, *Assistant Psychiatrist*
Dr. A.W. Kushner, *Assistant Psychiatrist*
Dr. M.J. MacDonald, *Assistant Psychiatrist*
Dr. E.M. Rosenberg, *Assistant Psychiatrist*
Dr. A.M. Shane, *Assistant Psychiatrist*
Dr. A. Stokes *Assistant Psychiatrist*
Dr. C.E. Taylor, *Assistant Psychiatrist*
Dr. D. Whitby, *Assistant Psychiatrist*

**Radiation Therapy**

Dr. R.M. Cunningham, *Head*
Dr. J. Aquino, *Associate Radiotherapist*
Dr. O.S.Y. Wong, *Assistant Radiotherapist*
Dr. N.R. Youssef, *Assistant Radiotherapist*

**Serology and Bacteriology**

Dr. C.E. van Rooyen, *Acting Head*

**Urology**

Dr. F.G. Mack, *Head*
Dr. W.A. Ernst, *Associate Urologist*
Dr. S.G. Lannon, *Associate Urologist*
Dr. P. Belitsky, *Assistant Urologist*
Dr. O.H. Millard, *Assistant Urologist*
Dr. S.K. Sandomirski, *Assistant Urologist*

**Family Medicine**

Dr. H.C. Still, *Head*
Dr. H.I. MacGregor, *Associate Physician*
Dr. D.C. Brown, *Assistant Physician*
Dr. R.L. Brown, *Assistant Physician*
Dr. B.L. Reid, *Assistant Physician*

**Consulting Staff**

Dr. J.C. Acker, *Consultant in Surgery (Orthopedics)*
Dr. T.B. Acker, *Consultant in Surgery (Orthopedics)*
Dr. H.B. Atlee, *Consultant in Gynecology*
Dr. C.J.W. Beckwith, *Consultant in Medicine*
Dr. N.B. Coward, *Consultant in Paediatrics*
Dr. J.M. Crosby, *Consultant in Paediatrics*
Dr. F.A. Dunsworth, *Consultant in Psychiatry*
Dr. J.F. Filbee, *Consultant in Radiotherapy*
Dr. E.I. Glenister, *Consultant in Ophthalmology*
Dr. C.L. Gosse, *Consultant in Urology*
Dr. K.M. Grant, *Consultant in Gynecology*
Dr. R.S. Grant, *Consultant in Paediatrics*
Qr. J.S. Hammerling, *Consultant in Otolaryngology*
Dr. W.K. House, *Consultant in Surgery*
Dr. D.J. MacKenzie, *Consultant in Serology & Bacteriology*
Dr. J.J. McKiggan, *Consultant in Medicine (Gastroenterology)*
Dr. J.D. MacLean, *Consultant in Dentistry*
Dr. J.M. MacSween, *Consultant in Medicine (Immuniology)*
Dr. C.S. Marshall, *Consultant in Neurology*
Dr. B.F. Miller, *Consultant in Surgery (Orthopedics)*
Dr. A.L. Murphy, *Consultant in Surgery*
Dr. R.M. Ritchie, *Consultant in Paediatrics*
Dr. E.F. Ross, *Consultant in Surgery*
Dr. D.L. Roy, *Consultant in Medicine (Paediatric Cardiology)*
Dr. T.M. Sieniewicz, *Consultant in Medicine (Allergy)*
Dr. J.A.R. Tibbles, *Consultant in Paediatrics*
Dr. C.E. van Rooyen, *Consultant in Serology & Bacteriology*
Dr. R.J. Weil, *Consultant in Psychiatry*
Dr. J.P. Welch, *Consultant in Medical Genetics*
Dr. U.A. Weste, *Consultant in Paediatrics*

**Publications**

**Cohen, A.D.**, Gower, O.E., Rogers, K.L. Pegrum, G.D. and deWardener, H.E.:
Reproductive Potential of Males Maintained on Chronic Hemodialysis.
Proceedings of Xth. European Dialysis and Transplantation Association (1973)

Forrest, J.N., **Cohen, A.D.**, Schon, D.A. and Epstein, F.H.
Na transport and Na-K-Atpase in Gills during adaptation to Seawater: Effects of Cortisol.
Amer. J. Physiol. 224(3): 709: 1973

**Macdonald, I.A., Williams, C.N.** and Mahony, D.E.
7d-hydroxysteroid dehydrogenase from Escherichia Coli B:
Preliminary Studies. Biochim. Biophys. Acta 309: 243-253, 1973

**Murray, H.S.**, Strottman, M., Cooke, A.
The Effect of Several Drugs on the Gastric Potential Difference in Man.
British Medical Journal, January, 1974

**Murray, H.S.**, Cooke, A.
Effect of Acid Perfusion of the Duodenum and Proximal Small Intestine on Gastric Emptying in Dogs (In Press)

**Murray, T.J.** Congenital Sensory Neuropathy
Brain 96: 387-394, 1973

**Murray, T.J.**, Pride, S. and Haley, G.
Motor Neuron Disease in Nova Scotia
Accepted for publication by the C.M.A.J.

**Murray, T.J.**: Treatment of Essential Tremor with Propranolol
Modern Medicine, April 16, 1973

**Murray, T.J.**, Silver, I., Tibbles, J. and Purkis, I.K.
Malignant Hyperthermia. Submitted for publication

**Ross, J.B.** Skin Biopsy
Newfoundland Medical Association Newsletter XV (4, 14, 1974)

**Ross, J.B.** Skin Disorders of School Children (In Press)

**Smith, E.R.**, Redwood, D.R., McCarron, W.E., and Epstein, S.E.:
Coronary occlusion in the conscious dog. Effects of alterations in arterial pressure produced by nitroglycerin, hemorrhage and alpha-adrenergicagonists on the degree of myocardial ischemia.
Circulation 47: 51, 1973.

Kent, E.M., **Smith, E.R.**, Redwood, D.R., Epstein, S.E.:
Electrical stability of acutely ischemic myocardium; Influences of heart rate and vagal stimulation.
Circulation 46: 291, 1973

Epstein, S.E., Goldstein, R.E., Redwood, Dr.R., Kent, K.M., **Smith, E.R.**:
Early phase of acute myocardial infarction:
Sudden death and new concepts of drug therapy
Ann. Int. Med. 78: 918, 1973

Goldstein, R.E., Karsh, R.B., **Smith, E.R.**, Orlando, M., Norman, D. Farnham, G., Redwood, D.R., Epstein, S.E.:
The influence of atropine and of vagally-mediated bradycardia on the occurrence of ventricular arrhythmias following acute coronary occlusion in the closed-chest dog.
Circulation 47: 1180, 1973.

**Williams, C.N.** Bile Acid Metabolism in Liver Disease: in Pathophysiology of Gastrointestinal Disease.
F.P. Brooks, ed., MacMillan, London

**Williams, C.N.**: Diet and Gastrointestinal Disease.
N.S. Medical Bulletin 51: 211, 1973

**Woodbury, J.F.L. and S. Ahmad**: The Dosage Effect of Enteric Coated ASA on Serum Salicylate Levels:
Nova Scotia Medical Bulletin, June, 1973

**Anderson, R.N.**: The Specialist Health Centre
Nova Scotia Council of Health, Background Papers, Vol. I.

Cameron, A.G., Gillis, W.R., Shires, D.B. and **Steeves, L.C.**
Maritime Ambulatory Records System
Nova Scotia Medical Bulletin, December, 1973

**Dickson, R.C.**: Quality of Medical Care
The Bulletin of the American College of Physicians, Vol 14, No. 2, February, 1973

**Dickson, R.C.** Some Thoughts on Relicensure or Recertification
Nova Scotia Medical Bulletin, Vol. 52: 16, February, 1973

**Dickson, R.C.** Quality of Medical Care
Nova Scotia Medical Bulletin, 52: 128, June, 1973

**Dickson, R.C.** Recertification and Relicensure
C.M.A.J. 109-842, November 3, 1973

**Dickson, R.C.** Post-Graduate Education of the Primary Physician – Are we Meeting the Country's Needs?
(In Press)

**Hayne, O.A.** and Sherman, L.A. In Vivo Behaviour of Fibrinogen Fragment D in Experimental Renal Hepatic and Reticulo-endothelial Dysfunction.
American J. of Path. 71: 220, 1973

MacDonald, A.S., **Auld, R.B.,** Lannon, S.G., **Langley, G.R. MacLeod, A.J.,** VanRooyen and **York, S.E.**
Kidney Transplantation in Nova Scotia: A Four Year Review.
N.S. Med. Bulletin, pg. 150-154, August, 1973

**Abstracts**

**Heffernan, L.P.M., Hayne, O.A.:** Peripheral Neuropathy Associated with Malignant Lymphoma:
9th. Annual Meeting of the Canadian Congress of Neurological Sciences

Tibbles, J., **Heffernan, L.P.M.** et al: Malignant Hyperthermia
9th. Annual Meeting of the Canadian Congress of Neurological Sciences.

**Macdonald, I.A., Williams, C.N.** and Mahony, D.E.:
7 d–hydroxysteroid dehydrogenase from E. Coli. B.
Can. Fed. Biol. Soc. 16: 64, 1973

**Murray, H.S.,** Strottman, M., Cooke, A:
The Effect of Several Drugs on the Gastric Potential Difference in Man

**Ross, J.B.** Proportionate Incidence of Disease in Dermatologic
Practice in Newfoundland over an eight year Period.
Canadian Dermatological Association Annual Meeting.

Redwood, D.R., **Smith, E.R.,** Goldstein, S., Henry, W.L.:
Echocardiography during upright exercise.
Amer. J. Cardiol. 31: 153, 1973

Goldstein, S.R., **Smith, R.R.:** An electrohydraulic system for ultrasonic echocardiography on exercising patients.
Tenth International Conference on Medical and Biological Engineering, 1973

Kent, K.M., **Smith, E.R.,** Redwood, D.R., and Epstein, S.E.:
Beneficial electrophysiologic effects of nitroglycerin during acute myocardial infarction. Clin. Research 21: 428, 1973

**Smith, E.R., Rae, J.R., Heffernan, L.P., and Anderson, R.N.**
Familial restrictive cardiomyopathy with associated skeletal "central core" myopathy. Can. Cardiov. Society Meetings, Oct., 1973

**Smith, E.R.,** Redwood, D.R., McCarron, W.E., Epstein, S.E:
Coronary artery occlusion in the conscious dog: Effects of alterations in arterial pressure produced by nitroglycerin, hemorrhage, and alpha-adrenergic agonists on the degree of myocardial ischemia. Can. Cardiov. Soc. Meeting, Oct., 1973

**Smith, F.M. and Langley, G.R.** Intracellular Markers of Red Blood Cell Age: Royal College of Phy. & Surg. of Canada, 1973

**Smith, F.M. and Langley, G.R.** The Microcyte: Observations on its Genesis and Significance. Royal College of Phy. & Surg. of Canada, 1973

Morse, J.W.I. and **Williams, C.N.** Cholecystokinin and Bile Analysis in the investigation of Biliary Pain. Ann. R.C.P. & S.(C) 6:27, 1973

**Auld, R.B.:** The Comparison of Various Diuretic Effects on Nephron Function in Chronic Caval and Normal Dogs
Can. Society of Clinical Investigation, Edmonton, Jan., 1973

**Auld, R.B.,** Boutilier, and the Staff of the Dialysis Unit, Victoria General Hospital, Halifax, Nova Scotia
Acute or Repeated Hemodialysis without Fistula or Shunt Creation
Canadian Soc. of Nephrology, Edmonton, Jan., 1973

**Presentations**

**Badley, B.W.D.**
"Gallstone Disease – The Scope of the Problem"
Royal College of Physicians and Surgeons, January, 1973
"Management of Symptomatic Hepatitis B"
Symposium on HB Hepatitis (Ministry of Health, Government of Ontario), September, 1973

**Cohen, A.D.**
"Reproductive Potential of Males Maintained on Chronic Hemodialysis."
10th. Annual Meeting of European Dialysis and Transplantation Association, Vienna, Austria, June 29, 1973

**Macdonald, I.A., Williams, C.N.** and Mahony, D.E.
"7 d–hydroxysteroid dehydrogenase from E. Coli. B."
Can. Fed. Biol. Soc. (Saskatoon), June, 1973

**Invited Lectures**

**Macdonald, I.A.,** Participant: Course in Laboratory Medicine
Dalhousie University, September, 1973
Technological Advancements in Bile Acid Analysis. Dept. of Biochem. Dalhousie University, Sept., 1973

**Murray, H.S.**
"The Effect of Several Drugs on the Gastric Potential Difference in Man."
American Gastroenterological Society Meeting, New York, May, 1973

**Murray, T.J.**
"CSF Dynamics in an Elderly Population."
Royal College of Physicians and Surgeons, Edmonton, Alberta, January, 1973

"The Treatment of Somnambulism with Amytriptyline"
Read by title at the American Academy of Neurology, Boston, Mass., April, 1973

"RISA Cisternography in the Study of Dementia"
Presented to the Atlantic Neurosciences Society, February, 1973

**Murray, T.J.**
"Malignant Hyperthemmia Due to Oral Ingestion of Tricyclic Antidepressants"
Presented to the Atlantic Neurological Association, Halifax 1973

Morse, J.W.I. and **Williams, C.N.**
"Cholecystokinin and Bile Analysis in the Investigation of Biliary Pain"
Royal College of Phys. & Surg, Edmonton, January, 1973

**Invited Lectures**

**Williams, C.N.** Panel: Modern concepts of gallstone formation, Royal College Annual Meeting, Edmonton, January, 1973
Participant: Course on Laboratory Medicine Dalhousie University, September, 1973
Annual Meeting of the N.S. Radiological Society Victoria General Hospital, November, 1973
Bile Acids and Liver Disease (to be published in Clin. Biochem, 1974)

**Fielding, D., Mezei, M. Ahmad, S and Woodbury, J.F.L.**

"Chemical and Biochemical Investigation of Therapies in Rheumatoid Arthritis"
33rd. International Congress of Pharmaceutical Sciences, Stockholm, September, 1973.

**Smith, E.R.,** Redwood, D.R., McCarron, W.E., and Epstein, S.E:
"Coronary occlusion in the conscious dog. Effects of alterations in arterial pressure produced by nitroglycerin hemmorhage and alpha-adrenergic agonists on the degree of myocardial ischemia"
26th. Annual Meeting Canadian Cardiovascular Society, October, 1973. (Winner of Young Investigator's Award, 1973)

**Dickson, R.C.**
"Recertification and Relicensure"
Address to Regional Meeting, American College of Physicians, Banff, April, 1973

**Dickson, R.C.**
"Post-Graduate Education of the Primary Physician – Are we Meeting the Country's Needs?"
Presented at New York Academy of Medicine, October 26, 1973.

**Auld, R.B.**
"The Comparison of Various Diuretic Effects on Nephron Function in Chronic Caval and Normal Dogs."
Presented to the Can. Soc. of Clin. Invest., Edmonton, Jan., 1973

**Auld, R.B.,** Boutiler, F., and the Staff of the Dialysis Unit, Victoria General Hospital, Halifax, Nova Scotia

"Acute or Repeated Hemodialysis without Fistula or Shunt Creation."
Presented to the Can. Soc. of Nephrology, Edmonton, Jan., 1973